

DESCRIPTIONS OF AUSTRALIAN CURCULIONIDÆ, WITH
NOTES ON PREVIOUSLY DESCRIBED SPECIES.

PART VIII.

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SUBFAMILY OTIORHYNCHIDES.

MERIMNETES FAGI, n. sp.

Reddish-brown, appendages paler. Densely clothed with fawn-coloured scales, frequently with a golden or golden-green gloss, and usually mottled or spotted with brown. In addition with numerous suberect setæ, varying from white to black, and usually forming a single row on each elytral interstice.

Rostrum with three carinæ, of which the median one is sometimes entirely concealed. First joint of funicle almost as long as second and third combined. *Prothorax* granulate-punctate, or somewhat vermiculate. *Elytra* ovate; with series of large, partially-concealed punctures; suture, third and fifth interstices feebly raised. Length (excluding rostrum), $4\frac{1}{2}$ - $6\frac{1}{4}$ mm.

Hab.—Tasmania: Hobart, Launceston, Burnie, Sheffield, Stonor, Mole Creek (A. M. Lea).

In general appearance rather close to *australis*, but smaller and somewhat wider, antennæ somewhat shorter, etc.

The bulk of the specimens appear to have the derm of a reddish-brown, but occasionally it is almost black. On the prothorax there is usually a rather feeble dark median stripe, and a shorter one on each side of the base. On the elytra the spots or mottlings are generally rather numerous, but not sharply defined or constant in position; there are generally also some dark spots on the abdomen. Most of the specimens were taken from the so-called native myrtle *Fagus Cunninghami*.

Numerous specimens from Waratah and two from Ulverstone differ in having the elytral setæ less erect, but I can find no features sufficient to be regarded as of specific importance.

In this and all the following species the rostrum is separated from the head by a transverse suture (sometimes almost concealed). Between the eyes there is a narrow longitudinal impression (also more or less concealed). The males differ from the females in being smaller, with the prothorax

less transverse, the elytra more convex, narrower and less ovate, with large punctures and narrower interstices, and the legs and antennæ longer. The basal segment of the abdomen also differs sexually, in some species being concave in the male and flat in the female, or flat in the male and convex in the female.

MERIMNETES SIMPLICIPENNIS, n. sp.

Reddish-brown, appendages paler.

Rostrum with very feeble and normally quite concealed carinæ. First joint of funicle as long as second and third combined. *Prothorax* with sides rather strongly rounded; with numerous, somewhat irregular, and more or less concealed granules, with a feeble median line. *Elytra* oblong-ovate; with regular rows of large, partially-concealed punctures; interstices not alternately raised. Length, $7\frac{1}{4}$ - $7\frac{1}{2}$ mm.

Hab.—Tasmania: Mount Wellington, Hobart (A. M. Lea).

Very close to *australis*, but both sexes slightly wider, the suture not subcarinated posteriorly, and the third and fifth interstices not at all raised above their fellows, but quite uniform with them. The elytral setæ also are almost uniformly disposed, instead of being more noticeable on the odd than the even interstices.

One of the three specimens before me has the derm almost black. The clothing is of the same nature as in the preceding species, but the dark patches are larger and very ill-defined, and there is a large blotch on the base of the prothorax. The elytral setæ are also somewhat longer and more uniformly whitish.

MERIMNETES MONTANUS, n. sp.

Black, antennæ and tarsi more or less diluted with red. Moderately densely clothed with white scales, with numerous very feeble spots of brown. In addition with rather short, semi-decumbent setæ.

Rostrum with three narrow carinæ, almost or quite concealed before abrasion. First joint of funicle subequal in length with second and third combined. *Prothorax* with rather strongly rounded sides; surface vermiculate; with a rather feeble median line. *Elytra* ovate, with regular rows of large, partially-concealed punctures; alternate interstices very feebly raised. Length, $6\frac{1}{4}$ - $6\frac{1}{2}$ mm.

Hab.—Tasmania: Summit of Mount Wellington (A. M. Lea).

The length is about equal to that of *uniformis*, and slightly less than that of *australis*, but from both species it

differs in being broader, antennæ somewhat shorter and stouter, eyes more projecting, rostrum stouter, prothorax shorter with more rounded sides, and the clothing somewhat different.

The white scales are not so dense as to conceal the derm, in consequence of which the whole insect has a somewhat greyish appearance. Many of them (especially along the suture) have a golden gloss. The darker elytral spots are nowhere sharply defined or large. The elytral setæ are much less erect than usual; on some specimens most of them are whitish, on others they are mostly dark. The basal segment of the abdomen is more concave in the male than usual.

MERIMNETES VIRIDIS, n. sp.

Black, appendages red. Densely clothed with green or greenish-grey scales, frequently with a golden gloss. In addition with short, semi-decumbent setæ.

Rostrum with a narrowly impressed and usually concealed median line. Antennæ thinner than usual; first joint of funicle slightly but distinctly longer than second and third combined. *Prothorax* granulate-punctate or feebly vermiculate. *Elytra* ovate; with regular rows of large, partially-concealed punctures; interstices regularly convex. Length, $4\frac{1}{2}$ - $5\frac{1}{2}$ mm.

Hab.—New South Wales: Mount Kosciusko (R. Helms and W. E. Raymond).

In size and structure almost identical with *oblongus*, but the clothing more or less metallic, instead of a dingy, feebly-mottled grey. A specimen from the Victorian Alps was given to me by Mr. Blackburn as *M. uniformis*, Boh. (?). It, however, has both legs and antennæ reddish, and is less than half the size of *Otiorynchus raucus* (a species with which Boheman compared *uniformis*).

Apparently a common species. The bulk of the scales are green, and frequently with a metallic gloss; many singly-scattered scales are decidedly golden. One specimen has the whole of the scales golden. With most species of the genus the rostrum is carinated, although to see the carinæ it is sometimes necessary to remove the scales; but in the present species the carinæ are entirely absent.

MERIMNETES CELMISLÆ, n. sp.

Black, antennæ (except club and tip of scape) red. Moderately densely clothed with brilliant metallic scales, varying from golden-green to purplish-blue. In addition with very short setæ.

Rostrum non-carinate. First joint of funicle slightly longer than second and third combined. *Prothorax* scarcely granulated, with fairly large, more or less concealed punctures. *Elytra* ovate, with regular rows of large, partially-concealed punctures; interstices regularly rounded. Length, $3\frac{2}{3}$ - $4\frac{1}{4}$ mm.

Hab.—Victoria: Mounts Buffalo and Baldi; New South Wales: Mount Kosciusko (H. J. Carter).

Readily distinguished from all species known to me by its black and red antennæ, black legs, and beautiful scales. Mr. Carter informs me that on Mount Kosciusko it is found at an elevation of 6,000 ft. on a large white daisy (*Celmisia*, sp.).

MERIMNETES DECIPIENS, n. sp.

Black, appendages reddish. Densely clothed with greyish scales, more or less densely-mottled or spotted with brown. In addition with moderately long, recurved setæ.

Rostrum very indistinctly carinated, even on abrasion. Antennæ rather shorter and stouter than usual in the genus; first joint of funicle somewhat shorter than second and third combined. *Prothorax* about as long as wide in male, gently transverse in female; granulate-punctate, and with a feeble median line; but derm almost entirely concealed. *Elytra* ovate, with regular rows of large punctures, appearing small and narrow through clothing; interstices regularly rounded. Length, 3-4 mm.

Hab.—Tasmania (H. H. D. Griffith), Mount Wellington, Hobart (A. M. Lea).

The smallest of the genus, and in size and appearance remarkably close to *Neomerimnetes destructor*, but the second segment of abdomen longer than third and fourth combined, and its suture with first not straight but curved upwards from each side, so that at the middle it is about one-half longer than it is at the sides.

The clothing is of a rather dingy slaty-grey, sometimes almost uniform, but usually more or less distinctly mottled or spotted with brown, especially on the elytra. On an occasional specimen the elytral clothing is mostly pale-brown, with spots of slaty-grey and darker brown.

NEOMERIMNETES ⁽¹⁾ INFLATUS, n. sp.

Reddish-brown, appendages reddish. Densely clothed with scales varying from grey to dark-brown. In addition

(1) The species of this genus bear a strong resemblance to those of *Merimnetes*, but may be at once distinguished therefrom by the perfectly straight sutures of the second abdominal segment.

with semi-decumbent setæ, similar in colour to the scales amongst which they are placed.

Rostrum almost parallel-sided to near apex, with a feeble and more or less concealed median carina. *Antennæ* not very thin; scape almost straight; first joint of funicle stouter and longer than second, second longer but no stouter than third. *Prothorax* moderately transverse, sides evenly rounded; densely granulate-punctate, but sculpture normally concealed. *Scutellum* small, but round and very convex. *Elytra* rather strongly convex, at base no wider than base of prothorax, but sides strongly inflated to about middle, and then strongly diminishing in width to apex; strongly striated, with fairly large but partially-concealed punctures in striæ; interstices evenly rounded. Length (excluding rostrum), $3\frac{1}{4}$ - $4\frac{1}{2}$ mm.

Hab.—Queensland: Mount Tambourine, Gympie (H. Hacker).

Larger than *destructor*, the elytra more inflated, scutellum more conspicuous and elytra more variegated.

The male differs from the female in being smaller and narrower, with the elytra less inflated and the legs and antennæ somewhat longer. The derm varies from a rather bright reddish-brown almost to black; the apical segments of the abdomen are sometimes reddish. The club is usually darker than the rest of the antennæ. The clothing is not alike on any two of the five specimens before me. On the type male it is of a dingy-grey, with a large parallel-sided, chocolate-brown patch extending the whole length of the prothorax; similar scales clothe most of the elytra, but with short spots of paler scales. On the type female it is also grey, but somewhat mottled with ochreous, the brown scales are absent from the prothorax, and on the elytra almost confined to a rather wide curved fascia about summit of posterior declivity. The other specimens have the clothing intermediate in character.

MERIMNETES UNIFORMIS, Boh.

This species was described as having the antennæ and legs black. The only species known to me in which both the antennæ and legs are black is one which I have from Mount Victoria and Jenolan. ⁽²⁾ It is, for the genus, a large species, measuring 8 mm. (including the rostrum), a length exceeded by only two species of the genus known to me. Boheman described the species as slightly longer and narrower than *Otiorynchus raucus*, ⁽³⁾ and with this my specimens agree.

⁽²⁾ In New South Wales, the type was from New Holland. In Masters' Catalogue it is recorded from Victoria.

⁽³⁾ Two specimens of *O. raucus* before me measure 7 and $7\frac{1}{2}$ mm. respectively.

M. æqualifrons has sometimes the legs and antennæ black, wholly or in part, but usually some parts are quite distinctly red; that species, however, is much smaller than *O. raucus*.

MERIMNETES ÆQUALIFRONS, Blackb.

This species was described as being without a fine longitudinal impression between the eyes. It, however, is really present, although sometimes concealed by the clothing. The scales are nearly always more or less ashen, but the elytra are occasionally feebly spotted, and the prothorax has sometimes a feeble dark stripe along the middle, and occasionally a very feeble one on each side. The legs and antennæ were not mentioned, being presumably included under the word "piceus." In most of the specimens before me they are more or less black, but occasionally are decidedly reddish, more especially the tibiæ and tarsi. The basal joint of the funicle is about as long as the three following combined.

SUBFAMILY AMYCTERIDES.

ACANTHOLOPHUS EXIMIUS, Macl. (*Cubicorrhynchus*).

A specimen in the Macleay Museum is labelled as *Cubicorrhynchus erimius*, Macl., and although it is not the type (this should be in the Australian Museum) it agrees with the description, and was probably named from the comparison with the type.⁽⁴⁾

The species is evidently an *Acantholophus*. Its head and prothorax certainly somewhat resemble those of several species of *Cubicorrhynchus*, but so do those of many other species of *Acantholophus* (*irroratus*, Macl., *denticollis*, Macl., and *planicollis*, Wath., amongst others). The shape of the head is almost exactly as in *irroratus*, except that the conjoined tubercles close to each eye are less prominent, and that the eyes are more prominent. The prothorax has numerous granules (not as numerous as in *denticollis* and *planicollis*) on its disc, interspersed with a few of larger size. There is a small conical tubercle on each side of apex, a less conspicuous one on each side of base, and a larger conjoined pair on each side near apex, but separated from apex by a deep impression.

(4) Dr. Ferguson has kindly compared this specimen with the type, and has written me as follows:—"I took the Macleay Museum specimen of *erimius* down to the Australian Museum and compared it with the types. They are identical in regard to tubercles, granules, etc., the only difference being that the types are slightly wider and fuller in the elytra, and somewhat more convex on ventral segments. These differences are in my opinion sexual, and I should think that the Macleay Museum specimen was the male, and the types females."

The elytra are those of quite a typical *Acantholophus*; the conical tubercles are on the third, fifth, and seventh interstices; those on the third commence on the base and terminate just below summit of posterior declivity, those on the fifth commence at the base and terminate at the declivity, and those on the seventh commence near the shoulder and terminate before the middle.

The Macleay Museum specimen is from Stirling Range (the locality given in Masters' Catalogue), but the type was recorded from King George Sound.

CUBICORRHYNCHUS STERILIS, Pasc.

The description of this species is utterly worthless, being little more than a brief comparison with *morosus*, a name which is probably applied to many different species in collections. In *morosus* and the allied species (*taurus*, *Mussoni*, *dilaticeps*, Blackb.; *piceosetosus*, *maculatus*, *calcaratus*, Macl.; *occultus* and *modestus*, Sloane) I believe it to be impossible to conclusively identify most of the species from the descriptions already published, and, further, that it is almost impossible to describe the females of most of them so that they can be conclusively identified. They all have an oblique, obtuse, granulated ridge on each side of the base of the prothorax, and in the middle of the base itself two granules rather more conspicuous than those elsewhere.

Most of the species, however, may be quite readily identified by the tibiae of the male, and especially the hind pair; and these are not even mentioned in the description of *sterilis*. But as the type should be in the British Museum, some hope may be entertained of having the tibiae described eventually.⁽⁵⁾

CUBICORRHYNCHUS PICEOSETOSUS, Macl.

The types of this species are both females. Their setae are darker and shorter (on the apical half of the elytra, however, they are much as in many other species of the genus) than in any other specimens I have seen, and this is possibly characteristic of the species. Structurally I cannot distinguish them from the types of *maculatus*, but possibly an examination of males of both forms would confirm them as distinct.

(5) Mr. C. J. Gahan writes me that the type of this species "is evidently a female; the hind tibiae are straight, not granulated, covered with pale scales, with setae interspersed."

CUBICORRHYNCHUS MUSSONI, Blackb., and DILATICEPS,
Blackb.

I think it extremely probable that the types of both these species are females. On enquiry from Mr. Blackburn he wrote that there was "nothing remarkable about the hind tibiae of either of the species you enquire about."

BUBARIS HARDCASTLEI, n. sp.

Black. Rostrum, under surface, and appendages with blackish setæ, becoming very short on upper surface.

Head rough. Rostrum wider than long, separated from head by a deep impression; with four strongly-punctured ridges and three deep grooves, of which the median one is continuous and the others deep and wide at base, but narrow and shallow at apex. Scape stout and curved, strongly inflated at apex; four apical joints of funicle strongly transverse. *Prothorax* moderately transverse, sides strongly rounded; with large, round, clearly-defined granules and small tubercles, differing only in size. *Elytra* comparatively short, base not much narrower than prothorax at its widest, sides dilated to beyond the middle; with rows of very large, irregular punctures, becoming more regular on sides; with rows of granules varying considerably in size; base with four strong projections. *Abdomen* with sparse and comparatively small punctures. Length, $9\frac{1}{2}$ -10 mm.

Hab.—Queensland: Cunnamulla (H. Hardcastle).

A very wide species with larger granules than usual and without special tubercles crowning the posterior declivity.

The two specimens before me (and which are probably both females) are practically without clothing other than the setæ; but as in some of the depressed places some very short pubescence can be seen, it is probable that on freshly-matured specimens the clothing would be more distinct. The elytral granules are very variable in size. Those on the second interstice are larger than any of the others, and many could fairly be regarded as small tubercles; the fourth interstice has also some large granules. The suture and posterior declivity are both granulate. The larger elytral granules, instead of being crowned by a single seta on each, are usually supplied with several, and the setæ, instead of being fairly long and suberect, are very short and depressed. Even when there is but one seta (both on prothorax and elytra) that seta arises from a feeble elevation in the middle of a circular depression, crowning the summit of the granule; the depressions are always conspicuous, even on the smallest granules. On each elytron there is a rather strong projection on the

shoulder and on the third interstice, that on the shoulder is more advanced than the other, but is no larger; each projection has numerous granules, and these are so disposed as to be suggestive of the suckers on the arms of an octopus. The suture could hardly be regarded as produced at the base.

MYTHITES FRATER, n. sp.

♂. Black; upper surface with very short, spare black setæ; the depressed spaces with indistinct brownish pubescence. A ridge of black setæ or hair extending from apex of abdomen to between middle coxæ, where it is densest. Legs with black setæ.

Head with three deep and wide grooves. Rostrum separated from head by a strong transverse impression, with a deep median channel, each side of base with a short continuation of the lateral groove of head. *Prothorax* about as long as wide; with large, irregular elevations and deep impressions. *Elytra* at base about the width of prothorax, somewhat wider about middle; with irregular rows of large punctures, becoming very large at sides; second interstice with a distinct tubercle just below summit of posterior declivity; third with a carinated ridge on basal third or two-fifths, the ridge projecting on to elytra at base, behind the ridge, with two or three distinct tubercles, of which the apical one is usually close to the one on second interstice; fifth and seventh interstices with some smaller tubercles; shoulders strongly projecting on to prothorax, a laterally-projecting subhumeral tubercle on each side. Front tibiæ inflated at apex. Length (excluding rostrum), $13\frac{1}{2}$ -18 mm.

♀. Differs in being larger, elytra wider, apex with two conjoined mucros, third interstice less produced at base; under-surface without the ridge of hair; and front tibiæ simple.

Hab.—New South Wales: Mudgee, Coonabarabran, New England, Clarence River (Macleay Museum).

I have seen in some collections as *Euomus basalis*, Boi., and *Mythites sulcicollis*, Germ.; but the sutural and third interstices not becoming conjoined at the base readily distinguishes from the species I have identified as *basalis*, although at a glance the two species appear to be identical; whilst *sulcicollis* has the prothorax densely granulate, and usually with a single pronounced median channel. From the description of *perfossus* it differs in being considerably larger (the smallest specimen is $6\frac{1}{2}$ instead of $4\frac{1}{2}$ German lines), with the basal joint of the funicle longer than wide (Germar describes the funicle as having all of its joints transverse), as well as in the sculpture of both prothorax and elytra. *Degener* is described as having only a single depressed carina in front.

On the prothorax there is a deep and wide median channel, on each side of which there is a strong ridge, strongly swollen laterally before the middle; on each side of the ridge there is a large irregular depression, interrupted by irregular elevations, of which a few are in the shape of large slightly convex granules or obtuse tubercles. The depression is roughly divided into four arms, of which one becomes very deep and terminates in front at the ridge margining the median channel, a second is continued round the front and sides so as to appear as a very irregular subapical constriction, a third opens feebly out into the median channel near the base, and the fourth is continued shallowly to the base where the projecting shoulder rests in it. But the whole surface of the prothorax seems more or less variable, although the elevations and the depressed spaces are always very pronounced. True isolated granules are nearly always absent. The tubercle on the second interstice sometimes appears almost as if it belonged to the third. On one female the ridge on the third interstice on the right side is continued almost to the posterior declivity. The tubercles on the seventh, although fairly large, appear to be little more than undulated spaces between the punctures, owing to the large size of these. Each front tibia of the male is inflated at the apex, with the under surface of the inflated portion concave and covered with short, dense, black setæ.

MYTHITES POROPTEROIDES, n. sp.

♀. Black; upper surface not very sparsely clothed with setæ, varying from short to moderately long, and from stramineous to black. Under-surface rather sparsely clothed, except for a distinct line of stramineous setæ extending from apex of abdomen to between middle coxæ: legs rather densely clothed.

Head with three deep and wide grooves, of which the median one is deeper but narrower than the others. Rostrum separated from head by a deep transverse impression, with a deep and wide median channel; each side of base with a short and comparatively shallow continuation of the lateral groove of head. *Prothorax* very little wider than long, sides feebly rounded; with a wide but rather shallow median channel, on each side of which is a curved elevation extending from apex to beyond the middle; outside of this is an irregular impression, with numerous large, round, slightly convex granules or small tubercles, occasionally almost conjoined. *Elytra* at base no wider than base of prothorax, but considerably wider before the middle, thence strongly decreasing in width to apex, which is rather acute; with irregular rows of

large punctures, becoming shallow towards sides; with two subconical and almost conjoined subsutural tubercles near apex; suture near base raised and joined on to third interstice; third (exclusive of the base) with two or three tubercles, of which the largest is just before summit of posterior declivity; fifth with a distinct and rather long (but not much elevated) median tubercle, with remnants of others, and a short ridge near base; seventh with some small tubercles; shoulders not projecting on to prothorax. Length, 18 mm.

Hab.—Victoria: Geelong (J. F. Mulder).

Readily distinguished from all other species known to me by the elytra strongly narrowed to apex, with the large sutural tubercles almost conjoined, and much closer to the apex than usual; thus instead of being at or close to the summit of the posterior declivity, they are quite close to the apex itself. The elytra are somewhat suggestive of *Poropterus conifer*. In its rounded shoulders it agrees with the female of *tuberculatus*, but the sutural and third interstices are conjoined at the base, instead of separated as in that species.

The irregular sublateral impression of the prothorax from some directions appears almost semi-circular, and curves round as if to join in with the median channel, but is prevented from doing so by two large granules. On the type (and only specimen I have seen) there are (exclusive of its basal connection with suture) two tubercles on the second interstice on the right side and three on the left; on the seventh there are seven on the right and five on the left. It is probable, however, that both the prothoracic and elytral sculpture is subject to more or less variation. It is probable that the male has strongly projecting shoulders.

MYTHITES FOVEIPENNIS, n. sp.

♂. Black; clothed with rather sparse blackish setæ; but with a dense ridge of dark-brown or blackish setæ, extending from apex of abdomen to between middle coxæ.

Head with a deep median groove and two or three deep ones on each side. Rostrum separated from head by a deep transverse impression; with a deep and wide median channel; with a deep groove on each side, commencing at base and running out at about the middle. *Prothorax* slightly wider than long, sides moderately rounded, disc feebly convex; with dense, clearly-defined granules, larger at about one-fourth from apex and one-fourth from base than elsewhere; without a median line. *Elytra* at base not much wider than prothorax, and very little wider elsewhere; apex widely rounded; with double irregular rows of very large punctures or foveæ, becoming regular on sides; third and fifth interstices dis-

tinctly raised, with several tubercles overhanging the posterior declivity, and with four projections at base. Length, 16-19 mm.

♀. Differs in being more convex, elytra wider, apex with two small mucros, tubercles overhanging the posterior declivity smaller, and under-surface with a line pubescence instead of a hairy ridge.

Hab.—New South Wales: Blue Mountains, Blackheath (Macleay Museum).

The elytra could scarcely be regarded as granulate, although in places (especially on the suture and posteriorly) a few almost obsolete ones are present; this alone would distinguish the species from *granulatus*. But the foveate impressions are also different; in this species, although very irregular in shape, they are almost regular in continuity, but in *granulatus* they are much fewer in number, more irregularly disposed, shallower, and usually transversely conjoined. The second interstice has a large tubercle overhanging the posterior declivity, the third has a smaller one, and the fifth a still smaller one; immediately below the tubercles there is a somewhat concave space on each side.

MYTHITES BASALIS, Boi.

The original description of this species is very unsatisfactory, but as it contains the expression "elytris . . . basi quasi furcaits," I think it may be correctly applied to a species I have long had named as *Euomus basalis*, Boi. This species occurs at King George Sound, Swan River, and Gun Island in Western Australia, and Port Lincoln in South Australia. It has the sutural interstice of each elytron obliquely joined on to the third at the base, so that it projects triangularly forward much as each shoulder does. In other species of the genus the first and third interstices are parallel at the base.

The species was originally described as an *Amycterus*. In Masters' Catalogue it appears under *Euomus*; but Pascoe referred to it (without explicitly consigning it to the genus, however) as a *Mythites*. I have also seen it as an *Acanthomus* (a generic synonym of *Mythites*).

DIALEPTOPUS ECHINATUS, Lea.

On fresh specimens of this species the elytra are conspicuously marked with three white stripes, meeting at the base and again at the summit of the posterior declivity. The white appears almost like enamel, and is present on the tubercles as well as on the general surface.

DIALEPTOPUS SEPIDIODES, Pasc.

There are before me six specimens which may belong to this species, as several of them agree well with the original description and figure; but they vary in length from $5\frac{1}{2}$ to $7\frac{1}{4}$ lines, instead of from 7 to 8. The tubercles vary in number, even sometimes on the different sides of an individual. The outer row on each elytron has from 4 to 6 tubercles; the inner from 5 to 8. The species to which these six specimens belong, whether *sepidioides* or not, may be readily distinguished from all others in my collection by the abdomen and metasternum being very highly polished, with a wide shallow transverse impression near the apex of the apical segment (Pascoe does not mention the abdomen). Two of the specimens have the prothoracic crests more parallel than have the others.

DIALEPTOPUS LONGIPES, Lea.

There are eight specimens before me (from Mount Barker and King George Sound) which probably belong to this species; they differ, however, in having the apical mucros more produced and sharper. The types of *longipes* appear to be females, and of the eight specimens now commented upon three appear to be females and five males. The males differ in being narrower (the greatest width of the elytra is no more than that of the prothorax) with the tubercles larger and more conical. The elytral tubercles vary from almost or quite black to a rather bright-red; one specimen has the legs, apex of elytra, and prothoracic crests also diluted with red.

DIALEPTOPUS PYRIFERUS, n. sp.

Black; with black setæ on head, front of prothorax, and legs: with a thin squamosity on parts of sterna; elsewhere almost or quite glabrous.

Rostrum with a fairly deep median channel, bounded by parallel ridges. *Prothorax* about as long as wide, sides strongly rounded and obtusely serrated, median crests feebly waved and obtusely punctate on their upper surface, diverging hindwards, but not to extreme base, greatest width between them about twice the width of their apices; a subfoveate depression in middle of median channel; a small tubercle on each side, allowing the projecting shoulder to rest between it and a median crest. *Elytra* rather narrow, each with two rows of four tubercles; shoulders strongly projecting and subgranulate; with rows of fairly large punctures along upper surface, becoming larger and more regular on sides: apex with a small, obtuse notch. *Abdomen* with large, sparse, shallow punctures, sometimes very feebly defined:

apical segment in one sex with a shallow median depression, in the other with a small, round, subapical fovea. *Legs* long and thin. Length, $11\frac{1}{2}$ - $12\frac{1}{2}$ mm.

Hab.—South Australia (Macleay and South Australian Museums).

In general appearance very close to *Lindensis*; but the prothoracic crests practically without granules, a less distance across their apices (the space across the apices in *Lindensis* is greater than in any other species known to me), and decidedly converging towards their bases, so that the space they enclose is more pear-shaped; the sides are also less serrated. The elytra not wide across the shoulders distinguishes from the description of *lugubris*, and the very distinct tubercles from the description of *obsoletus*. One specimen was sent as *macilentus*, but it certainly is not that species, which is described as having seven tubercles inwardly and four outwardly, and with the apex strongly emarginate.

The tubercles are not always as black as the rest of the elytra, but they are not distinctly reddish in any of the specimens under examination. They are rather large and increase in size hindwards, the inner ones being rather larger but more obtuse than the outer ones. On two specimens there are only three on the left outer row. The second row of punctures is not, or scarcely, deflected by the tubercles, but is continued on them, usually but one puncture being on the inner side of a tubercle, but sometimes two or three.

SUBFAMILY HYPERIDES.

EURYCHIRUS ALLENI, n. sp.

Dark-reddish-brown, antennæ and legs (wholly or in part) paler. Densely clothed with somewhat small, rounded scales; and with thin scattered setæ.

Head with normally-concealed punctures. Rostrum stout, the length of three basal joints of tarsi; with fairly dense punctures; with a feeble impunctate median carina. Two basal joints of funicle moderately long. *Prothorax* slightly wider than long, base not much wider than apex; with small, dense, normally-concealed punctures. *Elytra* (across shoulders) twice the width of prothorax, not much wider than long, shoulders projecting laterally; a strong conical tubercle on each side of middle, preapical callosities small but distinct; with rows of large but partially-concealed punctures, the rows deflected about tubercles. *Legs* moderately long; hind femora just passing elytra; tibiæ narrowly grooved throughout their lower surface. Length, $7-8\frac{1}{2}$ mm.

Hab.—Queensland: Cairns (E. Allen).

Differs from *bituberculatus* in being smaller, the prothorax smaller with less rounded sides, the elytral tubercles much larger, more acute and less upright, the shoulders more prominent, and the legs considerably shorter, with the hind femora thinner and just passing apex of elytra instead of considerably passing (in their ordinary position the hind femora appear to be too short to reach the apex), and the tarsi less parallel-sided. The thickest part of the hind femora in *bituberculatus* is thicker than the base of the elytral tubercles; in the present species the tubercles are considerably thicker than the femora. There are nine specimens before me, and they all differ in these respects from six of *bituberculatus*.

The scales are usually of a golden-brown or bright-fawn colour. On some specimens many of them are brightly golden, or even with a beautiful rose or purplish gloss, especially on the under surface and legs. On the prothorax there is usually a short dark stripe on each side at the base, and remnants of another at each side of apex: but the stripes would not meet if continued to base and apex. On the median segments of the abdomen also the clothing is variegated with black. On one specimen the clothing on the prothorax (except for the short dark stripes) and elytra is of a rather dingy pale-green.

SUBFAMILY APIONIDES.

APION.

In describing species of this genus previously I was under the impression that (in such species where there was a difference) the rostrum of the male was longer than that of the female. I now believe that the reverse is the case. If I am correct in this surmise the following of my previous descriptions will need correction:—

CONDENSATUM.

ÆMULUM.

PHILANTHUM.

FUSCOSUTURALE.

INTEGRICOLLE.

CARPOPHAGUM.

IMMUNDUM.

SOLANI.

ANTHIDIUM.

It will also be necessary to correct in the table *comosum*, Pasc., and *pulicare*, Pasc.

In the descriptions that follow where one sex has the rostrum longer than the other I have assumed that sex to be the female.

APION AGONIS, Lea.

The elytra of most specimens of this species have a very faint greenish gloss.

APION AMABILE, Lea.

The types of this species have the antennæ of a rather dark-reddish-brown.

APION ÆMULUM, Lea.

Four specimens from Chillagoe (Queensland) appear to belong to this species, but they differ from the type (which appears to be somewhat abraded) in having the clothing more uniformly covering the surface, so that the prothoracic punctures are normally quite concealed and the elytral punctures almost so. In the type the club is black and the rest of the antennæ of a rather dark-red. In the Chillagoe specimens the club is also black, but the other joints of the antennæ are reddish-flavous.

APION INORNATUM, n. sp.

Black, shining, glabrous.

Head with two shallow grooves between eyes. Rostrum moderately curved, about once and one-half the length of prothorax; very feebly and gradually decreasing in width; with sparse indistinct punctures. Antennæ inserted about two-fifths from base of rostrum. *Prothorax* about once and one-fourth as wide as long, sides rather suddenly constricted close to apex and then oblique to base, base much wider than apex; with small and rather numerous shallow punctures, causing the derm to appear slightly granulated. *Elytra* subcordate, about one-fourth wider than long; distinctly striated, with rather shallow punctures in the striæ; interstices feebly convex. Length, $2\frac{1}{3}$ mm.⁽⁶⁾

Hab.—New South Wales: Macleay River (R. Helms).

A short robust species, in build resembling *agonis* (with which it would be placed in the table previously given by me), but with the prothorax decidedly narrowed just behind apex, and the rostrum with much finer punctures.

APION TENUISTRIATUM, n. sp.

Black, shining, glabrous.

Head with a shallow but distinct depression between eyes; behind depression with distinct punctures, absent from rest of head. Rostrum almost straight, wide and almost parallel-sided, slightly longer than prothorax; with small and

(6) In previous descriptions of species of *Apion* I included the rostrum in each length given, but in this and all the following species the length is exclusive of the rostrum.

fairly numerous punctures. Antennæ inserted almost in exact middle of sides of rostrum. *Prothorax* distinctly longer than wide, base scarcely wider than apex, sides at apical third constricted, then bulged out and again constricted at basal third; with small and rather sparse but clearly-defined punctures. *Elytra* almost twice as long as their greatest width; very narrowly but distinctly striate, sutural stria with indistinct punctures, second and third without any, fourth with a few small ones, the others with more or less distinct ones except at base and apex. Length, $3\frac{1}{4}$ mm.

Hab.—New South Wales (Macleay Museum): Mount Irvine (E. W. Ferguson), National Park (A. M. Lea).

The head is impressed between the eyes with a rather feeble carina on each side, but not one in the middle. This feature will associate it with *pubicum* and *agonis*, rather than with *terræ-reginæ* and *argutulum*. The absence of pubescence will distinguish it from *pubicum*: the shape of the prothorax and the parallel-sided rostrum from *agonis*. At first sight it is strikingly like *Myrmacicus formicarius* of the *Cylades*.

APION LONGICOLLE, n. sp.

Black, shining, base of funicle dull-red; glabrous.

Head with a few small punctures margining eyes. *Rostrum* very feebly curved, slightly longer than prothorax, basal third half the width of head across eyes, then strongly narrowed to middle, and then parallel-sided to apex; basal third with small but fairly distinct punctures. Antennæ inserted one-third from base of rostrum. *Prothorax* distinctly longer than wide; base slightly wider than apex, sides gently increasing in width from apex, then rather suddenly but not strongly inflated, and then decreasing in width almost to base, with a slight projection near base; with very minute punctures scattered about, but some larger ones on the sides near base. *Elytra* fully twice as long as wide; very narrowly striated, fourth stria with a few indistinct punctures about middle, fifth to ninth with more distinct punctures, but also only about middle. Length, $3\frac{1}{4}$ mm.

Hab.—New South Wales: Wollongong (A. M. Lea).

In my table would be associated with *agonis*, from which it differs in being larger, prothorax and elytra of different shape, and some of the striæ absent just behind the shoulders. From *tenuistriatum* it differs in the prothorax not so suddenly bulged out, and the subapical constriction absent, the rostrum subulate, and the elytra less suddenly elevated above the prothorax.

The head from some directions appears to be perfectly flat between the eyes, but from other directions a very shallow

impression can be traced there. From above there appears to be a feeble granule on each side of the prothorax near the base, but from the side this is seen to be due to a rather deep impression.

APION CONVEXIPENNE, n. sp.

Black, somewhat shining.

Head with two almost imperceptible grooves between eyes. Rostrum about once and one-half the length of prothorax, rather thin, moderately curved, very feebly decreasing in width from base to apex; punctures very indistinct. Antennæ inserted about two-fifths from base of rostrum. *Prothorax* slightly wider than long, base much wider than apex, sides rather suddenly constricted near apex, and thence oblique to base; with small punctures fairly numerous in some places. *Elytra* strongly convex, subcordate, about once and one-half as long as greatest width: narrowly striated, with small punctures in striae, the interstices very finely transversely or obliquely strigose or wrinkled. Length, 3½ mm.

Hab.—Queensland: Cairns (E. Allen), Townsville (W. W. Froggatt).

In my table would be placed with *argutulum*, from which it differs in being considerably larger, the prothoracic punctures finer, the elytral striae much finer, and the prothorax and elytra of different shape. In appearance it strongly resembles *terrae-reginae*, but the elytra are apparently glabrous. The prothorax not bulged out in middle readily distinguishes it from *tenuistriatum*.

On close examination an extremely short and sparse pubescence can be traced, but it is so very indistinct (from most directions it is quite invisible under a Coddington lens) that the species could quite reasonably be regarded as glabrous. There is a short, deep, curved, subapical impression on each side of prothorax. The punctures towards sides of elytra appear (from certain directions) to be transversely impressed on the interstices, so that these look almost as if stitched together.

APION NIVEODISPERSUM, n. sp.

Black, somewhat shining, antennæ dull-red, front tibiae feebly or not at all diluted with red. With snowy pubescence, rather dense on sides of prothorax, sterna, about scutellum and apex of elytra; sparser but more regular on abdomen, legs, head, and base of rostrum, and absent elsewhere.

Head with two shallow grooves between eyes; with rather

numerous but sometimes concealed punctures. Rostrum of male the length of prothorax, of female distinctly longer, feebly curved, feebly decreasing in width from base to apex: basal third of male with fairly distinct punctures, basal fourth only in female. Antennæ inserted about one-third from base of rostrum. *Prothorax* moderately transverse, sides obliquely increasing in width from apex to base; with numerous rather small punctures. *Elytra* subcordate, about twice as long as width at base: distinctly striated, punctures in striæ distinct and fairly regular. Length, 2 mm.

Hab.—Queensland (Taylor Bros.), Chillagoe (H. Hacker).

In my table would be placed with *pudicum*, from which it differs in the uneven distribution of its clothing and by the very different shape of the elytra. In *pudicum* these are widest distinctly behind the middle; in the present species they are widest before the middle.

The snowy clothing appears to be readily abraded, especially on the upper surface.

APION SUBOPACUM, n. sp.

Black subopaque, some parts sometimes dull-red. Rather sparsely but almost regularly clothed with white pubescence, except that it is denser on side pieces of mesosternum and usually about scutellum than elsewhere.

Head very shallowly impressed between eyes. Rostrum moderately thin, rather lightly curved, in male about once and one-fourth the length of prothorax, in female once and one-half, with distinct punctures in regular series on the sides, smaller and sparser elsewhere. Antennæ inserted about one-fourth from base of rostrum. *Prothorax* moderately transverse, sides moderately rounded; with numerous rather distinct punctures; with a rather shallow, sub-basal foveate impression. *Elytra* about once and one-half as long as wide; strongly striated, punctures in striæ suboblong; interstices about as wide as striæ, with small dense punctures. Length, $1\frac{1}{2}$ -2 mm.

Hab.—Queensland (Taylor Bros.), Chillagoe (H. Hacker), Cairns.

The head appears to have two feeble grooves between the eyes, but they are sometimes so feeble that they would best, perhaps, be regarded as absent. But whether the species is regarded as associated with *terra-reginæ* or *pudicum*, it is abundantly distinct from either, and in fact from all described Australian species with black legs, by its strong elytral striation, with strong punctures in the striæ.

A few of the specimens before me have the legs, antennæ, and part of the rostrum (sometimes even the prothorax

and elytra) obscurely diluted with red, and there is generally at least a trace of red in the antennæ, but most specimens have the legs and rostrum deep black.

APION STILBUM, n. sp.

Black, shining, glabrous.

Head very shallowly impressed between eyes. Rostrum almost straight, about once and one-fourth the length of prothorax, basal fourth fairly wide, then strongly narrowed, with the apical two-thirds thin and parallel-sided; punctures very indistinct. Antennæ inserted at basal fourth of rostrum. *Prothorax* about as long as wide, sides gently increasing in width from apex to beyond the middle, and then decreasing to base; with very minute punctures. *Elytra* strongly convex, about twice as long as wide; finely striated, striæ without punctures except about middle third of the fifth to ninth; interstices not separately convex, with extremely minute punctures. Length, $1\frac{2}{3}$ -2 mm.

Hab.—New South Wales: Illawarra (H. J. Carter), Otford (A. M. Lea).

The rostrum at about the basal two-fifths is suddenly narrowed, and then parallel-sided to apex, so that it has a very unusual appearance. The head is decidedly impressed between the eyes, but the impression is single, so that in my table it would be associated with *agonis*, which has the rostrum regularly decreasing in width and with strong punctures; *agonis* is also a larger species, with wider elytra, on which the striæ are considerably stronger.

APION PILISTRIATUM, n. sp.

Black; legs (claws excepted) and antennæ flavous; rostrum of male (except basal fourth) also flavous, but of female black. Moderately densely clothed (more densely on sterna than elsewhere) with short white pubescence, on the elytra formed into distinct lines.

Head with derm partially concealed. Rostrum lightly curved, in male the length of prothorax, in female slightly longer; basal fourth in male with partially-concealed punctures; elsewhere and the whole rostrum of female with very small but fairly distinct punctures. Antennæ inserted at basal fourth of rostrum. *Prothorax* moderately transverse, sides lightly constricted near base and apex, and rounded in middle, base much wider than apex; with dense and rather strong punctures: with a small but rather deep sub-basal fovea. *Elytra* about once and one-half as long as wide;

strongly striate-punctate; interstices about as wide as striæ. Length, $1\frac{1}{5}$ - $1\frac{1}{3}$ mm.

Hab.—Queensland: Mulgrave River (H. Hacker).

In my table the female would be placed with *amabile*, from which it differs in its much smaller size, more compact form, and sparser and more regular clothing; the males would be placed with *condensatum* and *amulum*, which are also larger and have very different elytral clothing. In build it is like small specimens of *subopacum*, but the legs are pale.

The legs are very sparsely clothed, the rostrum is glabrous except at the base. On the elytra the pubescence is almost confined to a distinct line on each interstice. The interstices are about the same width as the striæ, but at the first glance their clothing causes them to appear much narrower.

APION CONGESTUM, n. sp.

Black, or with parts dark-reddish-brown; legs mostly flavous, rostrum and antennæ variable. Rather densely clothed (more densely on under than upper surface) with white or whitish pubescence, but somewhat variegated on elytra.

Head with fairly numerous but partially-concealed punctures. Rostrum lightly curved; in male fairly stout, very little longer than prothorax and with numerous but mostly partly-concealed punctures; in female longer and thinner than in male, with sparser and smaller punctures, concealed only towards base. Antennæ inserted at basal fourth of rostrum in male, slightly nearer the base in female. *Prothorax* moderately transverse, sides lightly constricted near base and apex, and rounded in middle, base about once and one-half the width of apex; with fairly dense and rather strong punctures: sub-basal fovea rather shallow. *Elytra* about twice as long as wide; strongly striate-punctate; interstices wider than striæ, with numerous small punctures. Length, 2 - $2\frac{1}{3}$ mm.

Hab.—Queensland: Chillagoe, Kuranda, Cairns (H. Hacker), Port Denison (Macleay Museum).

One of the specimens before me could fairly be regarded as having the body (including the rostrum) black. This would render its position in my table (depending greatly on colour) uncertain. But comparing it with *amabile* it differs in the rostrum being shorter and more noticeably curved, and in its black tarsi. *Condensatum* is a smaller species with a slightly shorter rostrum and variegated elytral clothing. *Amulum* has the rostrum almost straight. *Philanthum* is a smaller species with the tarsi not entirely dark, rostrum straighter, etc. *Fuscosuturale* is a smaller species, with longer rostrum and paler tarsi, etc.

One male has the body black with the apical half (but not tip) of rostrum and the legs (the tarsi excepted) flavous, but with the knees and tip of tibiæ infuscated, and its antennæ (including the club) flavous-red. Two other males have the elytra dark-reddish-brown, except the base apex and suture (the two colours obscurely limited) and the apical half of rostrum and the antennæ of a similar brown; two females have the knees much darker than in the males, with the rostrum and antennæ very obscurely diluted with red in parts. The clothing appears to be easily abraded, at least on the upper surface. On the elytra it is usually transversely infuscated (to about the fourth interstice on each) about the middle, the infuscate patch sometimes feebly extending towards the base. The rostrum of the male is sparsely clothed almost to the apex, but in the female it is clothed only towards the base.

APION VERTEBRALE, n. sp.

Of a rather bright-reddish-brown; scutellum, suture, under surface, head and parts of rostrum black, legs flavous but in parts infuscate. Moderately densely clothed with stramineous pubescence, paler and denser on under than upper surface.

Head with dense more or less concealed punctures. Rostrum very lightly curved; in male fairly stout, very little longer than prothorax and feebly decreasing in width from base to apex; with moderately dense punctures, more or less concealed on basal half; in female thinner and considerably longer and with smaller but less concealed punctures. Antennæ inserted at about one-third from base of rostrum. *Prothorax* and *elytra* much as in the preceding species, except that the prothorax is longer and with smaller punctures, and that the elytral interstices are more convex and wider. Length, $2\frac{1}{4}$ - $2\frac{1}{2}$ mm.

Hab.—New South Wales: Ourimbah (Macleay Museum and E. W. Ferguson), Gosford (H. J. Carter).

In build and clothing much like *amabile*, but prothorax and elytra pale. In build close to *congestum*, from which it is distinguished by the different colour of prothorax and the tarsi not entirely dark. In my table it would be associated with *foveicollis*, *teretirostre*, and *fuscotuturale*, all of which are much smaller and from Western Australia.

The margins of the elytra, except at the tip, are usually blackish, the coxæ trochanters and claws are black or blackish, with the tips of the tarsal joints and sometimes the knees and tips of tibiæ infuscate; sometimes also the femora are feebly infuscated in the middle. The rostrum of the male

has its tip and basal two-fifths almost black, the balance being of a rather bright-red (as also are the antennæ); in the female the paler portions are of an obscure reddish-brown, with the antennæ almost the same. On the elytra there is generally a transverse glabrous patch about the middle, extending across three interstices on each, but usually interrupted at suture; on some specimens the patch is quite sharply limited, but on others it is less distinct. On the male rather more than half of the rostrum is clothed; on the female the clothing is confined to the basal third.

APION MICROSCOPICUM, n. sp.

Flavous, parts of under surface and tip of rostrum somewhat darker, claws black. Moderately densely clothed with white pubescence, denser on sides of meso- and meta-sternum than elsewhere.

Head with concealed punctures. Rostrum lightly curved, about the length of prothorax in male, slightly longer in female; with small and fairly numerous punctures. Antennæ inserted at about basal third of rostrum. *Prothorax* moderately transverse, sides lightly increasing in width from apex to near base; with fairly numerous but more or less concealed punctures; with a small and frequently-concealed sub-basal fovea. *Elytra* about twice as long as wide; strongly striate-punctate; interstices slightly wider than striæ. Length, 1-1 $\frac{1}{3}$ mm.

Hab.—Tasmania: Hobart, Huon River, Frankford, Mount Wellington, Swansea, Mole Creek (A. M. Lea); Victoria: Emerald (H. H. D. Griffith).

The smallest species yet recorded from Australia; there is, however, a still smaller species (represented by a single abraded specimen) from North-Western Australia in the Macleay Museum.

The legs are generally paler than the other parts.

APION TASMANICUM, n. sp.

Of a rather bright-reddish-brown, legs somewhat paler; base and tip of rostrum, scutellum, suture, sterna, claws, and club black; tarsal joints mostly tipped with dark-brown, knees sometimes lightly infuscated. Moderately densely clothed with white or whitish pubescence, paler on under than upper surface, and denser on sides of meso- and meta-sternum than elsewhere.

Head with dense but normally-concealed punctures. Rostrum moderately curved, rather thin (thinner in female than in male), about once and one-fourth the length of prothorax in male, once and one-third in female; with small

and fairly numerous punctures, concealed only at base in male. Antennæ inserted about one-third from base of rostrum. *Prothorax* about once and one-half as wide as long, sides lightly constricted near base and apex, and rounded in middle, with fairly numerous and rather strong but partially-concealed punctures; sub-basal fovea shallow and usually concealed. *Elytra* not twice as long as wide; strongly striate-punctate, interstices much wider than striæ. Length, $1\frac{1}{2}$ -2 mm.

Hab.—Tasmania (Macleay Museum): Huon River, Frankford, Hobart (A. M. Lea).

On abrasion there is seen to be a slight impression at the base of the prothorax, but it could not be fairly called a fovea; but regarding it as such the species would be placed with *foveicolle* and *fuscosuturale*. From the former it is distinguished by its decidedly curved rostrum, and from the latter (to which in general appearance it is very close) by its black sterna. Regarding the prothorax as non-foveate, it should be placed with *integricolle* and *carpophagum*, both of which are considerably larger with paler legs, etc. From the South Australian *turbidum* it differs in being larger, with the rostrum more curved.

The colours are somewhat similar to those of *vertebrale*, but the legs are darker, and the size is much smaller. Sometimes the elytral margins are narrowly stained with black. There is a small glabrous or semi-glabrous spot on each elytron, on the second, third, and fourth interstices about the middle, and (probably owing to partial abrasion) the two frequently appear to be partially or quite conjoined. The rostrum is clothed only at the base.

APION NIGROSUTURALE, n. sp.

Dark-brown; scutellum, suture, and margins of elytra and under surface (abdomen excepted or not) black; legs flavous, tarsi infusate and claws black; antennæ dull-red, club darker; rostrum with the part between tip and basal third (which are black or blackish) somewhat flavous in male, much darker in female. Moderately clothed with whitish pubescence on upper-surface, and feebly variegated on elytra; on lower-surface with denser and snowy clothing; rostrum clothed almost to apex in male, at basal half only in female.

Head with dense partially-concealed punctures. Rostrum of male moderately stout, lightly curved, about the length of prothorax, with rather numerous but mostly concealed punctures; of female longer, thinner, and more curved, and with smaller but less concealed punctures. Antennæ inserted

at about one-fifth from base of rostrum. *Prothorax* and *elytra* as described in the preceding species. Length, $1\frac{2}{3}$ -2 mm.

Hab.—North-Western Australia (Macleay Museum): Wyndham (R. Helms).

In general appearance close to the preceding species, but smaller, darker, the rostrum (especially in the male) less curved, and the clothing denser and more variegated. Regarding it as (in my table) associated with *philanthum*, it differs in being smaller, paler, with the rostrum more curved and the disproportion between the sexes less pronounced, although still quite noticeable. If not associated with *philanthum* it would be with *integricolle* and *carpophagum*, each of which is a larger species, with the male rostrum stouter, etc. In length it is much the same as the South Australian *turbidum*, but it is wider, with slightly more curved rostrum and paler legs.

On the elytra there is a feeble transverse infusate patch of pubescence about the middle, and immediately behind (and usually before) the patch the clothing is paler and denser than usual, so that the darker patch, although not very dark, usually appears to be quite conspicuous.

SUBFAMILY RHINOMACERIDES.

AULETES.

In this genus the rostrum of the male is usually shorter than that of the female.

In the table of the genus given in Proc. Linn. Soc., New South Wales, 1898, p. 626, the fourth line "Colour entirely dark" should have been followed by a line "Colour not entirely dark."

AULETES MELANOCEPHALUS, Er.

This is probably one of the forms of *suturalis*, in which case, as the older name, it will take precedence. I have specimens of *suturalis* having the rostrum entirely dark, and others having it dark only at the base. But in all of them the suture is more or less distinctly infuscated; a character not mentioned by Erichson, so that the two names may really belong to distinct species.

AULETES FILIROSTRIS, Pasc.

A specimen from the Swan River probably belongs to this species, but the club of its antennæ is infuscated only instead of black, and in addition to its whitish pubescence these are scattered about darker and semi-erect setæ. Its

rostrum is rather more than twice the length of the prothorax. instead of "nearly twice as long," but this may be due to its being a female and the type a male.

AULETES NIGRITARSIS, Pasc.

I have seen no specimens that agree exactly with the description of this species; *aterrimus* and *imitator* have the legs entirely black. The dark varieties of *inconstans* have the hind femora and tibiæ partly dark and the rostrum straight.

AULETES MINOR, Lea.

Since the type of this species was described I have seen numerous other specimens (from Ourimbah and Gosford), and most of these are entirely black, or with a very faint purplish gloss on the elytra.

AULETES MELALEUCÆ, Lea.

I was in error in recording this species from Tasmania. There is a very closely-allied species, which caused me to make the mistake; it is described below as *decipiens*.

AULETES PUNCTIPENNIS, n. sp.

Flavous or reddish-flavous; tip of rostrum, club, and claw-joints more or less black. Moderately densely clothed with white pubescence.

Head with dense punctures. Rostrum almost straight, about once and one-fourth the length of prothorax, sides feebly incurved to middle; with a row of feeble punctures on each side. Antennæ inserted about one-fourth from base of rostrum, second joint longer than first and third. *Prothorax* not much wider than long, sides moderately rounded in middle, base very little wider than apex; with dense and rather small punctures. *Elytra* comparatively long, parallel-sided to near apex; with numerous and comparatively regular rows of punctures, rather larger than on prothorax, and almost as distinct at sides and apex as elsewhere. Length (excluding rostrum), $2\frac{1}{2}$ -3 mm.

Hab.—Tasmania: Frankford, Bruni Island (A. M. Lea); Victoria: Bullarook Forest (C. French); New South Wales: Illawarra (George Compere).

The club is sometimes infusate only, whilst occasionally its basal joint is scarcely paler than the rest of the antennæ. Two specimens are feebly infuscated between the eyes. The pubescence on some specimens is almost of a snowy whiteness, but it is liable to abrasion. In general appearance close to the species I have identified as *flirostris*, but the second joint

of antennæ longer than the first and third, instead of shorter.

A specimen from the Huon River is rather small, of a brighter colour, with paler club and sparser clothing; but its antennæ are as in normal specimens.

AULETES PUNCTICOLLIS, n. sp.

Reddish-flavous; metasternum, club, and two apical joints of tarsi black, rostrum becoming darker from base to apex but nowhere quite black. Moderately clothed with short whitish pubescence, and with a few scattered semi-erect setæ.

Head with dense punctures. Rostrum very feebly curved, about once and one-third the length of prothorax, sides feebly incurved to middle, with a row of feeble punctures on each side. Antennæ inserted close to base of rostrum, second joint the length of first, and stouter but slightly shorter than third. *Prothorax* not much wider than long, sides moderately rounded, base and apex subequal in width; with dense and comparatively coarse punctures. *Elytra* parallel-sided to near apex; with fairly distinct but small punctures near base (much smaller than on prothorax), and small and indistinct ones elsewhere. Length, 2 mm.

Hab.—Western Australia: Vasse (A. M. Lea).

The prothorax is of a brighter red than in *melaleuca*, and with sparser pubescence and sparser and larger punctures. The rostrum is longer than in *pallipes*, and the tarsi are differently coloured. On each of the two specimens before me there is a feeble infuscated spot between the eyes.

AULETES BRYOPHAGUS, n. sp.

Obscurely flavous; tips of claw-joints black, apical joint of antennæ infuscate. Clothed with rather long whitish pubescence, and with fairly numerous semi-erect setæ.

Head with fairly numerous but partially-concealed punctures. Rostrum almost straight, no longer than prothorax, with a row of punctures on each side. Antennæ inserted close to base of rostrum, second joint the length of first but shorter than third. *Prothorax* about as long as wide, sides feebly rounded, base and apex subequal; with fairly dense but partially-concealed punctures. *Elytra* parallel-sided to near apex: with dense punctures, small but fairly distinct at base, and smaller elsewhere, but all partially concealed. Length, $1\frac{3}{4}$ mm.

Hab.—Tasmania: Hobart (A. M. Lea).

Smaller and hairier than *punctipennis*, and the rostrum shorter; from *pilosus* it differs in being paler, with longer

antennæ and considerably finer punctures, both of prothorax and elytra. On the elytra the pubescence appears to be denser on some parts than on others, but this may be due to partial abrasion. The unique specimen described was taken in moss.

AULETES SOBRINUS, n. sp.

Black; elytra, rostrum, antennæ (basal joint and club excepted), legs (tarsi excepted), and parts of under surface of a rather dark-brown. Moderately clothed with not very short white pubescence, and with a few scattered semi-erect setæ.

Head with rather dense punctures. Rostrum lightly but distinctly curved, about once and one-fourth the length of prothorax, sides very feebly incurved to middle; with a row of punctures on each side. Antennæ inserted near base of rostrum, second joint slightly longer than first, and stouter than but equal in length with third. *Prothorax* moderately transverse, sides strongly rounded, base not much wider than apex: with moderately dense punctures. *Elytra* feebly dilated to beyond the middle; punctures at base as large as on prothorax, but smaller elsewhere. Length, 2 mm.

Hab.—South Australia.

The hairy and black prothorax will distinguish from all species except *variipennis*, which has a shorter rostrum and is otherwise different; in some respects it is fairly close to *densus*. In some lights the elytra of the type have a faint purplish gloss. The prothoracic punctures are about the size of those on *suturalis*, but not quite so dense. The elytral punctures are in feeble rows, but the linear arrangement is distinct only near the base.

AULETES ATERRIMUS, n. sp.

Deep black, middle of antennæ sometimes obscurely diluted with red. Clothed with dark subsetose pubescence.

Head with fairly dense punctures. Rostrum thin, distinctly curved, the length of head and prothorax combined, apex slightly inflated: with a row of feeble punctures on each side. Antennæ inserted at extreme base of rostrum, second joint subequal in length with first but slightly shorter than third. *Prothorax* moderately transverse, sides strongly rounded, base distinctly wider than apex: with dense, clearly-defined punctures. *Elytra* dilated posteriorly; with small punctures, nowhere sharply defined and all smaller than on prothorax. Length, $1\frac{2}{3}$ -2 mm.

Hab.—New South Wales: Sydney (H. J. Carter and A. M. Lea).

Considerably larger and more robust than *minor*, and with a longer and curved rostrum. The pubescence, although fairly dense, appears (except from certain directions) very sparse on account of its colour.

A specimen from Cairns probably belongs to this species but is larger ($2\frac{1}{4}$ mm.), rather more robust, and with somewhat more distinct elytral punctures.

AULETES IMITATOR, n. sp.

Deep black; middle of antennæ, or sometimes the second joint only, more or less diluted with red. Pubescence much as in the preceding species.

Head with not very dense punctures. Rostrum almost straight, in male the length of prothorax, in female slightly longer; with a row of distinct punctures on each side. Antennæ inserted near base of rostrum, second joint slightly shorter than first and distinctly shorter than third. *Prothorax* much as in the preceding species, but with rather larger punctures. *Elytra* with small, fairly dense, and clearly-defined punctures. Length, $1\frac{3}{4}$ -2 mm.

Hab.—Tasmania (Aug. Simson): Hobart, Mount Wellington, Huon River (A. M. Lea): South Australia (Macleay Museum).

In general appearance very close to the preceding species, but less robust, rostrum shorter, stouter, and straighter; with the antennæ not inserted at extreme base and the punctures of prothorax larger, and those of elytra more clearly defined; even the smaller ones on the elytra are quite clearly cut.

AULETES INCONSTANS, n. sp.

Black; funicle varying from flavous at base to infusate at apex; elytra variable in colour; legs reddish flavous, two apical joints of tarsi black. Moderately clothed with short, greyish pubescence.

Head with rather small and not very dense but clearly-defined punctures. Rostrum fairly stout, straight; in male the length of prothorax, in female somewhat longer; with a row of punctures on each side. Antennæ inserted near base of rostrum; second joint slightly shorter than first, and distinctly shorter than third. *Prothorax* moderately transverse, sides strongly rounded, base and apex almost equal; with dense, clearly-defined punctures. *Elytra* parallel-sided to near apex; punctures at base rather smaller than on prothorax, becoming much smaller at sides and posteriorly. Length, $1\frac{3}{4}$ - $2\frac{1}{2}$ mm.

Hab.—Tasmania: Mount Wellington (including summit), Hobart, Huon River (A. M. Lea).

A variable species close to *suturalis*, but prothorax always entirely black. The elytra are generally of a bright reddish-castaneous, with the suture and a fairly large space about the scutellum black, and the basal half of the sides infusate; in several specimens the suture is very narrowly infusate throughout, the rest of the elytra being very brightly coloured; on another there is a wide feeble infusate fascia just beyond the middle; occasionally the paler parts of the elytra are of an obscure flavous, whilst occasionally they are scarcely paler than the suture: and sometimes they have a decided purplish gloss.

One male (taken *in cop.* with a quite normal female) has the elytra entirely dark, and the legs dark except that the bases of the femora, the front tibiæ, and bases of the others are of a rather dingy-brown. Another male agrees with this except that its legs (except parts of the tarsi and of the hind tibiæ) are entirely flavous.

AULETES SUBCALCEATUS, n. sp.

Black; elytra of a dingy testaceous, suture darker; funicle of a dingy testaceous, the scape and club somewhat darker; legs obscurely testaceous, in parts black or infusate. Sparsely clothed with greyish pubescence, and with a few semi-erect setæ scattered about.

Head with moderately dense punctures. Rostrum straight; in male the length of prothorax, in female distinctly longer; feebly dilated from near base to apex; with a row of punctures on each side. Antennæ inserted about one-fourth from base of rostrum, two basal joints stout, subequal in length and each shorter than third. *Prothorax* distinctly transverse, sides moderately rounded, base and apex equal; with dense and moderately coarse punctures. *Elytra* parallel-sided to beyond the middle; punctures at base rather larger than on prothorax, becoming smaller elsewhere but everywhere distinct. Length, $1\frac{3}{4}$ -2 mm.

Hab.—Tasmania: Frankford, Hobart (A. M. Lea).

A small dingy species, in general appearance like a very small *calceatus*, and with a very feeble fringe of whitish pubescence behind the scutellum; but darker and with coarser punctures. In one specimen the prothorax is black but paler at base and apex, in the others it is of a dingy reddish-brown, but also slightly paler at base and apex. The elytral punctures are all clearly defined, and many of them appear to be in feeble rows.

AULETES VARIICOLLIS, n. sp.

Black; base and apex of prothorax, elytra (except suture), funicle, and legs (two apical joints of tarsi black, and femora infusate in parts), more or less reddish. Moderately clothed with short, greyish pubescence.

Head with moderately dense punctures. Rostrum almost straight; in male about once and one-fourth the length of prothorax, in female about once and one-half; sides feebly incurved to middle; with a row of small punctures on each side. Antennæ inserted near base of rostrum: second joint shorter than first and much shorter than third. *Prothorax* distinctly transverse, sides strongly rounded, base and apex equal; with dense and fairly large punctures. *Elytra* elongate, parallel-sided to beyond the middle; with dense punctures, at base about the size of those on prothorax, becoming smaller at sides and posteriorly. Length, $2\frac{1}{2}$ - $2\frac{3}{4}$ mm.

Hab.—Tasmania: Mount Wellington, Stonor (A. M. Lea).

Another variable species. Of five specimens before me but two agree with the above description of colour, a third has the elytra of a rather dingy-brown and the dark parts of the femora black, a fourth has the dark parts of the prothorax reduced to a rounded spot on each side whilst its femora are entirely pale, and a fifth has the prothorax as well as the femora entirely pale. The elytral punctures are very dense, without a trace of linear arrangement, and even the smaller ones are clearly defined. In general appearance it is something like *calceatus* and *densus*, but the punctures are smaller and denser.

Another specimen (from Bruni Island) possibly belongs to this species, but is entirely pale, except that the tip and sides of rostrum and claw-joints are infuscated; but as the punctures between its eyes are much sparser than in the other specimens it may represent a distinct species.

AULETES DECIPIENS, n. sp.

Flavous; head, rostrum, club, a wide prothoracic fascia, scutellum, suture, metasternum, and two apical joints of tarsi, black or blackish. Moderately clothed with rather short, greyish pubescence.

Head with moderately dense punctures. Rostrum straight; in male the length of prothorax, in female distinctly longer; sides feebly incurved to middle, with a row of punctures on each side. Antennæ inserted almost at extreme base of rostrum; second joint stouter but no longer than first,

and shorter than third. *Prothorax* moderately transverse, sides lightly rounded, base and apex equal; densely and rather coarsely punctured. *Elytra* feebly dilated posteriorly, with a few coarse punctures near base, elsewhere much smaller and somewhat rugose. Length, 2 mm.

Hab.—Tasmania: Hobart, Huon River, Frankford (A. M. Lea).

The abdomen is usually black, but sometimes dark-brown, the hind femora (and sometimes the middle ones as well) are infuscated in the middle, the sides of the elytra are usually infuscated towards the base. The prothoracic fascia in one specimen occupies more than half of the surface, and is more distant from the apex than the base, in two others it occupies less than half the surface, whilst in another it occupies almost the entire surface, but is paler and not so sharply defined; in another it is absent except for a feeble spot on each side of the base; another specimen agrees with this but has the abdomen entirely pale, whilst still another has both prothorax and abdomen entirely pale. The elytral punctures appear to have a faint linear arrangement.

In general appearance close to *melaleuca*, but rostrum much shorter, elytra with much more distinct punctures and prothorax with sparser and larger punctures.

SUBFAMILY HAPLONYCIDES.

HAPLONYX SCOLOPAX, Pasc.

It is probable that the description of this species was drawn up from a partially-abraded specimen of *Spencei*. Mr. Masters has sent me for examination a Queensland specimen labelled *scolopax* (it was quite probably from Mr. Masters that the type was received), which agrees with Pascoe's description, and which is certainly *Spencei*. I have also other specimens of *Spencei* from New South Wales, Victoria, and Tasmania, and ranging in length from 5 to 9 mm.

HAPLONYX USTIPENNIS, Pasc.

Of the type of this species Mr. Gahan wrote me:—"There appears to be a second small tooth distal to the first on the front femora. It can be seen when looking at the femur from the posterior side, but is more or less concealed by a bunch of scales when seen from the anterior side. The second tooth is more conspicuous in a second specimen of the species."

HAPLONYX MODICUS, n. sp.

Reddish-brown, in places obscurely stained with piceous; muzzle, club and tibial hooks black. Clothed with rather

thin and not very dense scales, varying from white to black, and forming feeble fascicles in places.

Rostrum almost straight. In male the length of prothorax; with coarse punctures, which behind insertion of antennæ cause an appearance as of seven fine costæ. In female the length of prothorax and scutellum combined, thinner but more dilated at apex than in male, and with smaller punctures and less conspicuous costæ. *Prothorax* densely granulate-punctate, and with a feeble median line. *Elytra* very little wider than prothorax, almost parallel-sided to beyond the middle; with rows of large and somewhat rugose but partially-concealed punctures; interstices with numerous small but frequently-concealed granules, and feebly tuberculate beneath fascicles. *Femora* strongly dentate, and each with a small supplementary tooth; front tibiæ strongly bisinuate, basal sinus the longer. Length, 5-5½ mm.

Hab.—Victoria: Grampians, Ararat (C. French).

On the prothorax the scales are either whitish or somewhat ochreous, and appear to form feeble oblique stripes; on the elytra similar scales are irregularly distributed, but to the naked eye the paler ones appear to be condensed into very feeble and thin transverse fasciæ. On the under surface, legs, head, and base of rostrum the scales are mostly of a dingy-white. The prothorax is without fascicles; but there is a rather large velvety spot, mostly behind, but partly on, the scutellum; and three feeble fascicles on the third interstice (of which only the median one is always traceable), and three still more feeble ones on the fifth (of which also only the median one is always traceable). The fascicles are composed of black or sooty scales, and these are very sparse on the rest of the elytra, and altogether absent elsewhere. With the head bent, the rostrum of the female extends fully to the abdomen.

Close to *ericeus*, but rostrum decidedly longer, thinner, and straighter, femora quite distinctly bidentate (in that species the second tooth is scarcely traceable). In *ericeus* the fascicles are composed of loosely-clustered scales and are rather long; in the present species they are shorter and closely compacted. In the present species also the median lobe or tooth of the front tibiæ is much more conspicuous. The general outline is much as in *cionoides* and *sevivittatus*.

HAPLONYX LATUS, n. sp.

Reddish-brown or dark-brown, in places darker. Moderately clothed with somewhat setose scales (except on the under-surface, where they are stouter), of three colours, white, ochreous, and black.

Rostrum rather wide, almost straight, about the length of prothorax in female, slightly shorter in male: basal two-thirds with coarse seriate punctures, and with five or seven feeble costæ, apical third with smaller and elongate but scarcely seriate punctures. *Prothorax* more than twice as wide as long, base feebly sinuated; with small, dense, and more or less concealed punctures. *Elytra* about one-third wider than prothorax, sides feebly dilated to middle, scarcely longer than wide; with regular rows of not very large and partially-concealed punctures; interstices much wider than punctures, and with numerous small but partially-concealed granules and punctures. *Femora* strongly unidentate; front tibiæ rather strongly bisinuate, basal sinus slightly shorter than the other. Length, $3\frac{1}{2}$ -4 mm.

Hab.—New South Wales: Mount Kosciusko, 5,700-6,000 ft. (R. Helms), Blue Mountains (E. W. Ferguson), Mount Victoria (A. M. Lea).

Of the three specimens before me one is almost piceous, but with the antennæ (including the club) paler: a second is of a rather light-reddish-brown, but with the apical two-thirds of the club almost black; the other is intermediate between these two, but its club is entirely pale, and the basal two-thirds of its rostrum almost black. The white scales are dense on the under surface and legs, and rather thickly scattered on the head, base of rostrum, and flanks of prothorax. The ochreous ones are rather thickly but evenly scattered on the prothorax (here, however, they are sometimes replaced by white ones) and sparsely on the elytra, except that they are dense about the scutellum (on one specimen they are dense almost to the shoulders) and on the second and third interstices towards the apex. The black scales are numerous (but from some directions indistinct) on prothorax and elytra, less numerous on the upper surface of the legs, and sparse on the head. The median costa of the rostrum is almost continuous to the apex, but between the insertion of antennæ it is longitudinally impressed in the middle, in two of the three specimens.

A wide, peculiar, and somewhat depressed-looking species with conspicuous rostral carinæ. The clothing on the apical portion of the elytra near the suture is faintly suggestive of *vicinus*; which, however, is very different in other respects. The black scales, although numerous, are very indistinct from most directions.

HAPLONYX MUCIDUS, n. sp.

Dull-reddish-brown, sides of sterna somewhat darker. Moderately clothed with whitish setose scales, paler and more regular on the under-surface and legs than on the upper-surface.

Rostrum stout and lightly curved, in female the length of prothorax, in male somewhat shorter; with dense punctures, coarse and irregular on basal two-thirds, and smaller towards apex. *Prothorax* not much more than once and one-fourth as wide as long; densely granulate-punctate. *Elytra* about one-fourth wider than prothorax; with rows of fairly large and deep punctures; interstices distinctly wider than punctures, with fairly large granules at base, becoming smaller or replaced by punctures posteriorly. *Femora* acutely dentate, and each with a small supplementary tooth; front tibiæ rather strongly and almost equally bisinuate. Length, $5.6\frac{1}{2}$ mm.

Hab.—North-Western Australia (Macleay Museum).

On the prothorax the scales are denser at the sides than elsewhere, the disc at first appearing to be nude; but on close examination is seen to be clothed with fine short setæ; at the base, however, the clothing is as on the sides. The elytra appear to have three similar semi-nude spaces on each side: one close to base, one about middle, and one close to apex. There is a fairly distinct median costa on the basal two-thirds of rostrum, but no others can be distinctly traced.

In general appearance close to *seminudus*, but the prothorax and elytra nowhere really nude, although at a glance there appear to be nude spaces; the prothoracic granules and punctures are also not quite the same, and the elytral punctures are considerably smaller, with the interstices wider.

HAPLONYX (AOLLES) VARIEGATUS, n. sp.

Black, antennæ reddish; legs varying from almost entirely reddish to almost entirely black. Rather densely clothed with white, ochreous, and black scales.

Rostrum wide, straight, and flattened, scarcely more than twice as long as wide; the length of prothorax in female, slightly shorter in male; with dense punctures, more or less seriate in arrangement throughout, but leaving exposed several feeble costæ on basal two-thirds. *Prothorax* more than twice as wide as long; with dense but more or less concealed punctures. *Elytra* not much wider than prothorax, and not much longer than wide; with regular rows of not very large but deep punctures; interstices distinctly wider than punctures and apparently with numerous small granules or punctures. *Femora* strongly unidentate; front tibiæ strongly bisinuate; claw-joint of tarsi scarcely exerted beyond lobes of third. Length, $2\frac{3}{4}$ -3 mm.

Hab.—New South Wales: Mount Kosciusko, 5,700-6,000 ft. (R. Helms); Tasmania: Bruni Island, Hobart, Summit of Mount Wellington (A. M. Lea).

The white scales are mostly confined to the under-surface and legs, but a few are scattered about on the sides, and occasionally elsewhere on both prothorax and elytra; on one specimen they form numerous feeble spots on the elytra. The ochreous scales are dense on the prothorax and head; on the elytra in places they quite regularly clothe the interstices, but they are frequently interrupted by small spots of black scales.

In general appearance very close to *sordidus*, but claw-joint much less conspicuous, front tibiæ shorter, much more strongly bisinuate and less curved, femora unidentate and funicle with six instead of seven joints. In size and shape it is close to *rubiginosus*, Pasc., but is considerably darker, rostrum entirely black, etc.

HAPLONYX (AOLLES) MÆSTUS, n. sp.

Black or almost black, antennæ of a rather bright-red. Densely clothed with soft white scales on under-surface and legs, sparse about eyes, condensed at sides of prothorax, about scutellum and base of elytra and a few scattered singly on elytra; rest of upper-surface and upper surface of legs with deep black scales.

Rostrum moderately wide, and almost straight, the length of prothorax; with coarse punctures, somewhat seriate in arrangement on the basal half, and smaller towards apex. *Prothorax* almost thrice as wide as long; punctures concealed. *Elytra* not much wider than prothorax, and very little longer than wide; with regular rows of not very large but deep punctures; interstices much wider than punctures. *Femora* strongly unidentate; front tibiæ strongly bisinuate; tarsi with claw-joint scarcely traceable. Length, $3\frac{1}{2}$ mm.

Hab.—Victoria: Sea Lake (J. C. Goudie).

On the two specimens before me (each of which is probably a female) the white scales are very conspicuous about the scutellum; on one of them the base of the elytra has fairly numerous white scales elsewhere; but on the other there are very few except about the scutellum itself; on the rest of the elytra the isolated white scales are confined to the striæ. The antennæ are inserted rather nearer the middle of the rostrum than usual. Only the median costa is at all distinct on the rostrum, but feeble remnants of others can be traced.

The absence of a median and apical fasciæ from the elytra and the presence of white isolated scales in the striæ distinguish from *trifasciatus*. The prothorax at a glance appears to have clothing only at the sides, but this is due to the scales on the disc being as black as the derm on which they rest.

HAPLONYX (AOLLES) PUNCTICOLLIS, n. sp.

Of a rather light-brownish-red, head and a rather large patch on shoulders piceous. Under-surface and legs with moderately dense whitish scales; upper-surface with sparsely-distributed whitish scales, and with small indistinct reddish-brown ones.

Rostrum straight and rather wide, slightly shorter than prothorax; basal two-thirds with seriate punctures and distinct costæ; apical third with dense regular punctures. *Prothorax* about twice as wide as long; with dense, small, shallow punctures. *Elytra* very little wider than prothorax, and not much longer than wide; with regular rows of not very large but deep and subquadrate punctures; interstices much wider than punctures, and with numerous small granules. *Femora* strongly unidentate; front tibiæ strongly bisinuate; tarsi with claw-joint scarcely traceable. Length, $3\frac{1}{2}$ mm.

Hab.—Queensland: Cooktown (J. A. Anderson).

On the prothorax the whitish scales form a feeble spot in the middle of the apex, and feeble spots at the sides of the disc; the flanks, however, being rather densely clothed; but most of the scales are of a rather bright-reddish-brown, and indistinct from most directions. On the basal two-thirds of the rostrum there are four distinct but more or less oblique and irregular costæ, with a feeble median one. From some directions the prothoracic punctures appear to be placed in close concentric semicircles, of which the convex side is directed towards the base, their scales also are usually slightly depressed below the general level.

HAPLONYX (AOLLES) MINIMUS, n. sp.

Of a rather light chestnut-brown, in parts darker or not. Moderately clothed with large soft scales, mostly white, but somewhat variegated on prothorax and elytra.

Rostrum wide and straight; the length of prothorax in male, slightly longer in female; with dense punctures partially concealed on basal half. *Prothorax* about thrice as wide as long, punctures concealed. *Elytra* very little wider than prothorax, about once and two-thirds as long as wide, parallel-sided to beyond the middle; punctures more or less concealed. *Femora* very feebly unidentate; front tibiæ very feebly bisinuate; tarsi with the claw-joint very indistinct. Length, $1\frac{1}{2}$ - $1\frac{3}{4}$ mm.

Hab.—New South Wales: Mount Victoria: Tasmania: Hobart (A. M. Lea).

Two of the specimens before me are (except as to the clothing) of a uniform shade of colour throughout; but most of them have the scutellum and most (in one specimen all) of

the under-surface black: the black, however, except as to the coxæ, does not extend to the legs. On the elytra the darker scales, which are usually of a dingy-brown, form feeble irregular spots, or are singly but thickly scattered; on the prothorax they do not appear to form spots. There are apparently regular rows of punctures on the elytra, but each puncture in the rows is almost or completely filled by a scale, so that the punctures themselves cannot be clearly seen, but they are narrower than the interstices: these apparently being without granules.

The smallest species of the subfamily known to me. *Uniformis*, the next smallest species, is decidedly wider in proportion, and differs in other particulars. The very short prothorax and comparatively long elytra are very distinctive features. From most directions the femora appear to be edentate.

SUBFAMILY ZYGOPIDES.

METIALMA, Pascoe, Ann. and Mag., Nat. Hist., 1871, vol. vii., p. 217.

This genus of *Zygopides* has not hitherto been recorded as Australian. It may be recognized by the compact body, large and feebly-separated eyes, enormous side pieces of meso- and meta-sternum, *Lamosaccus*-like abdomen and pygidium, very stout femora, each armed with a very large triangular tooth, and by the curious basally-arched tibiæ. Pascoe was acquainted with 5 species, and speaks of their "very uniform and distinctive appearance," and the 5 species before me are almost identical in sculpture. Of the species that he described, the clothing of the present one apparently most resembles that of *scenica*, from India.

METIALMA AUSTRALIÆ, n. sp.

Black; antennæ, tarsi, and apical half of rostrum reddish, tibiæ obscurely diluted with red. Clothed with white more or less setose scales on setæ, closely applied to derm and irregularly distributed: elsewhere glabrous or with blackish scales.

Rostrum strongly curved; basal half with three acute carinæ, apical half shining and with very minute punctures. *Prothorax* moderately transverse, base much wider than apex, and strongly produced to middle: with a very feeble median carina: with small, dense, round punctures. *Elytra* cordate, not much longer than wide; with fairly deep punctures in narrow, sharply-defined striæ: interstices with numerous small punctures. *Femora* very stout, especially the front pair, and

all very strongly dentate, especially the front pair; front tibiae very strongly arched at base. Length, $4\frac{3}{4}$ mm.

Hab.—Queensland: Cairns (probably collected by E. Allen or H. Elgner).

The white clothing is fairly dense on the basal half of the rostrum, forms a very narrow line between the eyes, forms irregular lines on the prothorax and numerous feeble spots on the elytra; there is, however, a conspicuous spot on the suture at apex and another on and about the scutellum. On the under-surface the white clothing is more regular, but there is a conspicuous dark spot on each side of each of the second, third, and fourth abdominal segments. On the four front legs the clothing is almost entirely white, but on the hind pair it is variegated with black. The inner base of the front tibiae is supplied with long fine hair, but this may be confined to the male.

There is a second species of the genus in the Macleay Museum (from Cape York); it differs from the above species in having the eyes produced to a point on their lower edge, and the hind margin of each sinuous. In *Australiae* the eyes are evenly rounded externally and in front. I have not described the second species, however, as the only specimen before me is in bad condition.

MECOPUS TIPULARIS, Pasc.

This species extends from the Illawarra district to Somerset. It may be readily identified by its tridentate hind femora. The clothing of the upper surface is mostly black, but with white or ochreous scales covering a variable amount of surface, but always less than in any other species before me. In size it varies from 5 to $6\frac{1}{2}$ mm.

MECOPUS MACLEAYI, n. sp.

♂. Black: antennae and sometimes parts of the legs dull-red. Densely clothed with sooty-brown scales, with numerous white or whitish and pale-brown scales scattered about, and condensed into small spots. On the under-surface the pale scales are rather more numerous than the dark ones.

Rostrum scarcely twice the length of prothorax; apical half shining and with fine punctures, basal half subopaque and with coarser punctures; obtusely tricarinated. Second joint of funicle slightly longer than first. *Prothorax* about twice as wide as the length down middle, with dense, normally-concealed punctures. *Elytra* subtriangular; suture and most of the interstices with a few small granules, third interstice with two or three small conical tubercles or teeth about the middle, and a stronger subapical one which projects slightly

beyond the tip; punctures partially concealed. *Prosternum* unarmed. Front *femora* longer than rostrum, finely and acutely dentate; hind femora each with a strong acute tooth and a smaller and more obtuse one; basal joint of front tarsus lightly curved, about half the length of its supporting tibia. Length, $4\frac{3}{4}$ -5 mm.

Hab.—Queensland: Endeavour River (Macleay Museum).

The very long and thin legs and distinctly fimbriated front tarsi are proofs that the three specimens before me are males, although there are no pectoral spines; but two other species (*pulvereus* and *serrirostris*, both exotic and very different from the present species) are similarly unarmed.

The scutellum is conspicuously white, the paler scales on the prothorax form feeble lines fairly distinct to the naked eye but confused under a lens. The white scales, although not clothing the whole of the abdomen, are continuous across the four apical segments. On two specimens the apical half of the hind tibiae is densely clothed with white scales. On one specimen on each elytron the third interstice has three small tubercles about the middle; on another there are two tubercles on each side, and on the other two on one side and three on the other.

MECOPUS PICTUS, n. sp.

Black; antennae, rostrum (wholly or in part), and tarsi reddish; prothorax and elytra sometimes diluted with red. Rather densely clothed with scales varying from white (usually tinged with ochreous) to slaty-brown.

Rostrum not twice as long as eyes; apical third shining and with fine but distinct punctures, basal two-thirds with coarser but partially-concealed punctures, and with an acute median carina and several feeble sublateral ones. Second joint of funicle distinctly longer than first. *Prothorax* almost thrice as wide as the length down middle; punctures normally concealed. *Elytra* subtriangular; with series of large, suboblong, partially-concealed punctures; without small conical tubercles, but with fairly numerous granules, which on the third interstice form a feebly-elevated ridge about the base and middle. *Prosternum* unarmed. Front *femora* about as long as rostrum, each with an acute and rather small tooth, middle rather more strongly armed, hind pair each with a large triangular acute tooth; tarsi about as long as tibiae, basal joint of each about half its total length. Length, $3\frac{1}{2}$ -5 mm.

Hab.—Queensland: Endeavour River, Cairns (Macleay Museum).

Three of the specimens before me are small and three are large, and these may represent the sexes; otherwise I am not

able to distinguish them, and quite possibly they are all females. In Pascoe's table of the *Zygopides* the species would be placed in *Mecopus*, but the unarmed breast (in several species of *Mecopus*, however, the breast is unarmed in both sexes) and strongly unidentate hind femora are aberrant characters. Probably had it been before Pascoe he would have referred it to a new genus, or perhaps to *Chirozetes* (which, however, has the breast armed in the male). From the species of *Mecopus* previously recorded from Australia it may be distinguished by its unarmed breast and unidentate hind femora. In structure it closely resembles a species of *Agametis* in my collection, but the pectoral canal is absent.

On the prothorax there is a very conspicuous median stripe (strongly narrowed at its middle) of pale scales bounded by dark ones; on the sides the clothing is mixed. The scutellum has also very dense pale scales. On the elytra the clothing to the naked eye appears to be greyish, with two dark oblique stripes on each side, one commencing near the shoulder and reaching the suture about the middle, the other subapical. On the under-surface the clothing is mostly pale, but with dark spots on the sides of the sterna and on the intercoxal process of abdomen. The apical half of the hind tibiæ has conspicuous white clothing. The elytral granules are less noticeable on the small than on the large specimens.

TEMIALMA, n. g.

Head rather small. Eyes rather large, round, frontal, almost touching, finely faceted. Rostrum about the length of prothorax, rather thin, moderately curved; scrobes invisible from above, not extending to eyes. Antennæ rather thin; scape inserted about middle of rostrum, distinctly shorter than funicle; funicle seven-jointed, first two joints moderately long, the second longer than first; club elliptic, subsolid. *Prothorax* transverse, base strongly bisinuate, apex subtubular, ocular lobes very obtuse. *Scutellum* small. *Elytra* short, base closely applied to prothorax, shoulders rounded. *Prosternum* with a rather deep pectoral canal, bounded behind by narrow vertical walls. Mesosternum with large side pieces, the outer one of which appears like a wedge between the prothorax and elytra. *Metasternum* strongly convex, moderately long, episterna wide. *Abdomen* large, obliquely ascending to apex, two basal segments large, especially the first, third and fourth short. *Legs* not very long; femora stout, especially the front pair, and very strongly triangularly dentate; tibiæ curved and compressed; tarsi rather narrow. *Body* rhomboidal.

The large eyes (although occupying less of the head than in other genera), large and almost parallel-sided metasternal episterna, separating the hind coxæ from the elytra, and the pectoral canal indicate that this genus belongs to the *Zygopides*; although the side pieces of the mesosternum are suggestive of the *Baridiides* (as they are also in *Metialma*). In Pascoe's table of the *Zygopides*, if the pectoral canal is regarded as being limited behind it would be placed with *Nyphæba*, which has coarsely faceted eyes, pectoral canal as in *Idotasia*, and is otherwise different. Regarding the canal as being gradually effaced behind, it would be placed with *Telaugia*, which has linear femora and is otherwise different.

The walls of the pectoral canal behind the front coxæ appear to belong to the mesosternum, and it is only when the prothorax has been separated from the body that their true location can be proved, when they appear like two triangular flanges. Somewhat similar processes are to be seen in *Mechistocerus* and *Aonychus* of the *Cryptorhynchides*. The pygidium is distinct on four of the specimens under examination, but concealed on two others.

TEMIALMA SUTURALIS, n. sp.

Black; tip of rostrum and tibiæ dull-red, femora darker, tarsi and antennæ paler. Clothed with mixed black-and-white depressed setæ; suture with two distinct spots of yellowish setæ, one beyond the middle, the other (and smaller one) apical; rostrum glabrous, except about base.

Head with dense and rather small, clearly-defined punctures. Rostrum shining; apical half with a few small punctures at sides; basal half with two shallow grooves on each side, and with fairly numerous punctures on sides. *Prothorax* about once and one-fourth wider than long, sides moderately rounded; punctures as on head, but slightly larger. *Elytra* not much longer than wide, base trisinate, sides nowhere parallel, suture strongly depressed towards base and slightly elevated towards apex; narrowly striate, the interstices with dense punctures as on head. *Under surface* with small dense punctures. *Front femora* very strongly dentate, the teeth compressed, the other femora with somewhat smaller but more acute teeth. Length, $3\frac{3}{4}$ - $4\frac{1}{2}$ mm.

Hab.—Queensland: Endeavour River (Macleay Museum).

A larger percentage of the clothing is white on the underthan on the upper-surface. The apical half of the suture is densely clothed, but the clothing between the yellowish spots being of the same colour as the derm, is not conspicuous.

LAMITEMA, n. g.

Rostrum somewhat shorter than prothorax and not very thin, rather feebly curved. First joint of funicle longer and stouter than second, which is short and not much longer than third; club ovate. *Pectoral canal* distinct but not very deep in front, where it is bounded by thin walls, absent beyond coxæ. Other characters as in preceding genus.

The femoral teeth though large are narrower than in the preceding genus and the rostrum is somewhat stouter, but in all other generic characters it agrees with it, except in the pectoral canal; in the species described below it is fairly deep only in front of the coxæ, and absent behind, instead of being bounded by the remarkable flanges so noticeable in *suturalis*. At first sight the two species certainly appear congeneric, and even the clothing is somewhat similar.

In Pascoe's table of the *Zygopides* the genus would be placed with *Osphilia* and *Metialma*. The pectoral canal will distinguish it from *Metialma*.⁽⁷⁾ *Osphilia* is very briefly compared with *Metialma*, but as its head is figured as being almost entirely occupied by the eyes, and Pascoe makes no mention of a pectoral canal, it appears best to refer it to a new genus rather than to risk placing it in one from which it is probably distinct.

LAMITEMA DECIPIENS, n. sp.

Black; antennæ and tarsi reddish, rest of legs obscurely or not at all diluted with red. Upper-surface with indistinct dark depressed setæ, and a number of spots of yellowish-white or ochreous setæ; clothing of under-surface mostly white, but denser and yellower on sides of three apical segments than elsewhere.

Head with small dense punctures. *Rostrum* about the length of front tibiæ, shining; with small punctures in front, becoming more distinct on sides and towards base; basal half with two shallow grooves on each side. *Prothorax* not much wider than long, sides moderately rounded; with dense and clearly-defined, but rather small punctures. *Elytra* not much longer than wide, base trisinate, sides nowhere parallel, suture depressed towards base; narrowly striate, with fairly distinct punctures in striæ: interstices with rather dense punctures. *Under surface* densely punctate. *Femora* with large acutely-triangular teeth, those of the front pair largest. Length, 3-3½ mm.

(7) Pascoe describes the rostrum of *Metialma* as being cylindrical at the base, but in four species of the genus before me (including the typical one, *nævea*) this does not appear to be the case.

Hab.—Queensland: Cairns (Macleay Museum).

The outlines are almost exactly as in the preceding species. There are at least four distinct spots of yellowish clothing on the prothorax, but generally more; on the suture there are three, one close to scutellum, one beyond the middle, and one apical—the latter two, however, are sometimes almost conjoined. On the rest of the elytra there are usually numerous very feeble spots, sometimes causing a feeble fasciate appearance. There is generally also a spot on the forehead.

AGAMETIS.⁽⁸⁾

This genus has not hitherto been recorded as Australian; but there is a species from North Queensland before me that undoubtedly belongs to it. This species agrees well—in shape—with Pascoe's figure of *festiva*, but is considerably smaller, with different clothing. The funicle is six-jointed, with the second joint long. The general appearance is of a small, pectorally-unarmed *Mecopus*. Pascoe describes the tarsi as *breviusculi*, but they are figured (pl. xix., figs. 5 and 5b) as rather long in the type, and they are rather long in the species before me.

AGAMETIS BIFASCIATA, n. sp.

Reddish, in some parts somewhat mottled with brown; antennæ and tarsi paler than elsewhere. Rather densely clothed with scales varying from almost white to rusty-brown.

Head with eyes occupying almost the entire upper-surface and very narrowly separated along middle. Rostrum rather long and thin, strongly curved, dilated and squamose near base, glabrous elsewhere; impunctate except near base. Scape about half the length of the funicle and club combined; second joint of funicle about twice the length of first, and the length of the four following combined. *Prothorax* more than twice as wide as the length down middle, apex rather strongly incurved to middle, the front angles produced into rather strong ocular lobes, base strongly bisinuate and much wider than apex; with small, dense, normally-concealed punctures. *Scutellum* transverse. *Elytra* not much wider than extreme base of prothorax, sides feebly diminishing in width from base to near apex, when they become strongly rounded; with regular rows of large punctures, in feeble striæ, but the striæ more pronounced and punctures smaller towards apex and sides; with two feeble but wide transverse impressions; with some very small granules, more noticeable on posterior declivity (especially on its summit) than elsewhere. *Under-surface* with dense but normally-concealed punctures. First

(8) Pascoe, Journ. Linn. Soc. x., p. 473.

segment of abdomen as long as three following combined, second also as long as three following combined. *Legs* moderately long; hind femora much longer than the others, strongly and acutely dentate, teeth of the other femora acute but smaller. Length, $5-5\frac{1}{2}$ mm.

Hab.—Queensland: Cairns (Macleay Museum).

The clothing of the under-surface and legs is denser and paler than elsewhere, but the legs have some dark spots or blotches; the prothorax has a faint median stripe and still fainter lateral ones. On the elytra there are two fairly distinct fasciæ of pale scales; one before and one behind the middle, and not quite extending to the sides; from the sides the fasciæ are seen to cover the surface of two transverse depressions; of which, however, the postmedian one is rather feeble.

PHAUNÆUS, n. g.

Head small. Eyes not very large; separated almost the width of rostrum at base; facets of moderate size. Rostrum very long, thin, and curved; scrobes lateral. Antennæ thin; scape not extending back to eye; funicle seven-jointed, two basal joints moderately long. *Prothorax* rather narrow at apex, increasing in width to base, which is almost evenly rounded; ocular lobes almost rectangular. *Scutellum* small. *Elytra* cordate, shoulders strongly rounded. *Prosternum* semi-circularly emarginate in front, but without a pectoral canal. *Metasternum* slightly longer than following segment; episterna narrow, but each with an acute triangular internal extension in front. *Abdomen* with first segment rather large, second in middle very little longer than third or fourth, but at sides almost as long as the two combined. *Legs* long; front coxæ touching, middle lightly separated; femora edentate; four front tibiæ strongly curved; tarsi wide, third joint deeply bilobed, fourth rather short and stout, claws simple and widely diverging.

Apparently belongs to a group of aberrant genera referred by Pascoe to the *Zygopides*, but which eventually will have to be regarded as forming a distinct subfamily. In Pascoe's table of the *Zygopides* it would be placed with *Nauphaus*, as the intercoxal process, although fairly wide, is much narrower than in *Arachnopus*, but the two genera can have little in common, as the shape, antennæ, and rostrum are all different, and there is no pectoral canal. I know of no closely-allied described genus, although there are several unnamed ones before me. In shape the body is much like *Idotasia*, but that genus has a pectoral canal.

Pascoe's fig. 8 (*Thyestetha nitida*) on pl. xvi of Ann. and Mag., Nat. Hist., 1871 (vol. vii., ser. iv.), will give a

fairly good idea of the appearance of the insect described below.

PHAUNÆUS LONGIROSTRIS, n. sp.

Black, shining. Upper-surface glabrous except for some white scales on suture. Under-surface and legs with dense white scales in places; but glabrous elsewhere.

Head with small, dense punctures. Rostrum considerably longer than head and prothorax combined, with rather numerous punctures, except for an impunctate line along middle of basal three-fourths. Scape inserted about one-third from apex of rostrum, almost as long as funicle and club combined. *Prothorax* strongly convex; with rather numerous and small but clearly-defined punctures. *Elytra* strongly convex, at base closely applied to prothorax, but shoulders strongly rounded, thence rapidly diminishing in width to apex; with rows of rather small but clearly-defined punctures, becoming very small posteriorly, and in striæ only towards sides, and one near suture. Hind *femora* considerably passing apex of elytra. Length, $2\frac{3}{4}$ -3 mm.

Hab.—Queensland: Cairns (E. Allen).

There are white scales on the suture near apex and some near base, but the latter appear to be easily abraded, as on several specimens they are absent, but their position is marked by minute punctures. The under surface of each of the femora has a ridge of scales, white at the base but darker near the apex, and these scales from some directions cause the femora to appear dentate, although they are really edentate. On an occasional specimen parts of the legs are feebly diluted with red.